# CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No: 142/MP/2012 with I.A. 7/2013

Coram:

Shri Gireesh B. Pradhan, Chairperson Shri A.K Singhal, Member

Date of Order: 2.9.2015

#### In the matter of

Petition under Section 20 "Power to Remove Difficulty" of Central Electricity Regulatory Commission (Regulation of Power Supply) Regulations, 2010 read with Regulation 111 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 in the matter of non-payment of transmission charges by the beneficiaries to the petitioner.

## And

#### In the matter of

Power Grid Corporation of India Limited B-9, Qutub Institutional Area, Katwaria Sarai, New Delhi

.....Petitioner

Vs

- NTPC Limited Scope Complex, 7 Institutional Areas, Lodi Road, New Delhi- 110003
- 2. NHPC Limited, Sector-33, Faridabad- 121003, Haryana
- SJVN Limited
  2<sup>nd</sup> Floor, Gulmohar Enclave, Bhanot House,
  Yusuf Sarai,
  New Delhi
- 4. NEEPCO Limited Brookland Compound, Lower New Colony, Shillong-793003



5. THDC India Limited Pragatipuram By Pass Road, Rishikesh- 249201

Power System Operation Corporation Limited,
 18-A, Shaheed Jeet Singh Sansanwal Marg,
 Karwaria Sarai, New Delhi- 110016

....Respondents

## Following were present:

Shri N.K.Jain, PGCIL Shri S.S. Barpanda, NLDC Shri Rajiv Porwal, NRLDC Shri H.K. Chawla, NRLDC Shri P.B. Venkatesh, NTPC Shri Ajay Dua, NTPC

## **ORDER**

## Petitioner's case:

The petitioner, Power Grid Corporation of India Ltd, (PGCIL), has been raising bills and collecting transmission charges for its network as per Regulation 32 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 till 30.6.2011 and the Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 (Sharing Regulations) with effect from 1.7.2011. The petitioner is also discharging the function of billing, collection and disbursement of PoC charges on behalf of all the ISTS licensees.

2. The petitioner has submitted that it filed Petition No. 213/MP/2011 in November 2011 in which direction was sought for removal of difficulty of transmission licensee to effect regulation of power supply in terms of the Central Electricity Regulatory Commission (Regulation of Power Supply) Regulations, 2010 (RPS Regulations). However, the Commission vide order dated 25.1.2012 observed

that "the provision clearly protects the interest of the transmission licensee, including the petitioner, to recover the outstanding dues by resorting to the regulation of power supply".

- 3. The petitioner has submitted that on account of non-payment of transmission charges by the Designated ISTS Customers (DICs), substantial amount has accumulated against the DICs. As on 6.6.2012, the outstanding dues of DICs beyond 60 days was about ₹748 crore which has resulted in unnecessary financial hardship to the petitioner and its resultant impact on the petitioner's ability to sustain its operations. The petitioner has submitted that if the amount remains outstanding beyond 90 days, it would affect the financial health and expansion plans of the petitioner and adversely impact its credit rating and its ability to raise funds for future projects.
- 4. The petitioner has submitted that in the interest of integrated grid operation and the need to allow free flow of electricity in the Inter-State Transmission System, the regulations and codes of the Commission require that opening of feeders should not be normally resorted to despite non-performance of the obligations on the part of the concerned DICs. The petitioner has submitted that DICs cannot be allowed to take advantage of their defaults and continue to avail the transmission services without discharging the reciprocal obligations of due payment of the PoC Charges.
- 5. The petitioner has submitted that the RPS Regulations envisage implementation of the regulation of the power supply concurrently in case the defaulting entity has dues of generating company as well as transmission licensee. The petitioner has further submitted that it is easier to implement the regulation of

power supply concurrently with the generating company, but sharing of additional revenue in such cases is difficult as the respondent generating companies dispute proportionate sharing of additional revenues in the ratio of the dues of generator and transmission licensee. In this connection, the petitioner has referred to the correspondence between SJVNL and the petitioner and has submitted that SJVNL has not paid any amount (as on the date of filing of the petition) against the proceeds of sale of regulated power. However, the petitioner has submitted that on account of concurrent regulation of power supply of BRPL, BYPL and UPPCL, the petitioner has received an amount of ₹2.18 crore from NHPC.

6. The petitioner has submitted that the enforcement of the RPS Regulations against the defaulting entities needs to be enforced by requiring the generating companies who have agreements with the defaulting DICs to implement the sale of electricity to third parties at a rate higher than what they would get from the defaulting beneficiaries and after adjustment of the amounts due to such generating companies, to utilize the surplus for meeting the outstanding POC charges. The selection of the generating stations for such regulation of power supply to the defaulting beneficiaries is necessarily to be on 'least cost generation units on merit order basis' to make the regulation effective. The petitioner has submitted that such selection of generating company and particular generating unit has not been possible in the past by mutual consultation between the petitioner and the respondents as they have not provided consent under the RPS Regulations to the petitioner for number of reasons, except in case of concurrent regulation of power supply where respondent generating companies have also decided for implementation of regulation of power supply of some DICs.

- 7. The petitioner has projected the following practical difficulties in operationalization of the provisions of RPS Regulations by a transmission licensee:
  - (a) RPS Regulations provide that the duration and quantum of open access be finalized in consultation with the generating companies. However, during consultation process, the respondents insist for the following conditions which are difficult to be fulfilled by a transmission licensee:
    - (i) Transmission licensee to establish cheapest source of power;
    - (ii) First cheapest source of power to be regulated;
    - (iii) Transmission licensee to find alternate buyers for regulated power;
    - (iv) Calculation of arriving at the quantum along with expected selling price;
    - (v) Prevailing price of electricity sold through traders directly to be indicated along with Power Exchange uniform market clearing price;
    - (vi) Details of selling price in case of regulation with other Respondents;
    - (vii) To indemnify Respondents for any disputes raised by customers with whom PPA is signed;
    - (viii) To indemnify Respondents for any efficiency loss; and
    - (ix) Private generators should also be considered for RPS Regulations.
  - (b) RPS Regulations specifies "preferably cheapest source of power". The problems encountered are as under:
    - (i) Hydro sources are always cheaper. However, due to their multipurpose and cyclic nature, same are generally not available.
    - (ii) Quantum of Hydro is very small and makes little impact.

- (iii) Thermal source insist that Hydro sources, being cheaper should be regulated first.
- 8. In order to substantiate the above difficulty arising on account of the respondent generating companies, the petitioner has enumerated some of the following incidences:

# (A) Respondent No.1, NTPC Limited:

- (a) Notices were issued to BRPL and BYPL for regulation of power with effect from 1.11.2011 and 27.1.2012 respectively. However, the same could not be affected due to non-availability of consent from NTPC.
- (b) The issue of outstanding dues was discussed in the Quarterly Progress Review (QPR) meeting held on 12.3.2012. Secretary (Power), Ministry of Power advised that NTPC and PGCIL should work for mutual benefit. Subsequently, Secretary (Power), Ministry of Power vide letter dated 21.3.2012 directed NTPC to extend co-operation similar to that extended by SJVNL and NHPC, to PGCIL in implementation of power supply. In response, NTPC vide letter dated 3.4.2012, stated that in view of the acute shortfall in generation, it would not be appropriate for NTPC to resort to regulation of power supply to the defaulting utility. PGCIL vide letter dated 10.4.2012 informed NTPC that as discussed in the presence of Secretary (Power), regulation shall not be effected till 31.3.2012 to enable NTPC to meet generation target of the year 2011-12 and further requested co-operation for implementation of RPS Regulations in future.

- (c) Subsequently, PGCIL vide its letter dated 7.6.2012 requested NTPC to implement the regulation of power supply in the States of Uttar Pradesh, Rajasthan, Bihar, West Bengal, Odisha and Jharkhand. In response, NTPC vide letter dated 31.5.2012 sought clarifications with regard to MoU targets, PPA conditions, sale of power, etc. Therefore, the regulation of power supply could not be implemented due to non-cooperation of NTPC.
- (d) In the meantime, while discussion and finalization of the plan of regulation of power supply was going on, BRPL/ BYPL made a down payment of ₹ 135 crore and payment of balance amount ₹ 100 crore was tied up in four months.
- (e) Notice was issued to JSEB on 16.12.2011 for regulation of power supply from 22.12.2011. However, the same could not be implemented due to lack of consent from NTPC.

# (B) NHPC Ltd. and SJVNL:

- (a) Notices were issued on 24.2.2012 for regulation of power supply w.e.f. 6.3.2012 to the distribution companies of Rajasthan (JVVN, JDVVN, AVVN). Despite reminder dated 19.3.2012, regulation of power supply could not be implemented due to non-availability of the consent from NHPC and SJVNL.
- (b) PGCIL vide its letter dated 24.5.2012 sought consent from NHPC and SJVNL to regulate power supply to the distribution companies of U.P., Rajasthan, Bihar, West Bengal, Odisha and Jharkhand. Whereas, no response was received from NHPC, SJVNL sought information regarding outstanding dues beyond 60 days from UP and distribution companies of Rajasthan in respect

- of power supplied from NJHPS to enable it to take a view on regulation of power supply.
- (c) In response to notice dated 25.5.2012 regarding regulation of power supply to Arunachal Pradesh and Meghalaya, NEEPCO vide letter dated 29.5.2012 informed that the regulation of power supply should not be effected due to non-availability of water in the States.
- (d) No response was received from THDC to the notice dated 24.5.2012 regarding regulation of power supply to UP and distribution companies of Rajasthan.
- 9. The petitioner has submitted that despite huge outstanding dues and persistent non-cooperation by the respondents, the petitioner is making all efforts to ensure almost 100% availability of its network for the overall benefit of all the stakeholders including DICs and generating companies.
- 10. The petitioner has requested to involve an Independent Agency to administer the regulation of power supply from the generating stations to the defaulting beneficiaries for non-payment of the PoC charges. The petitioner has suggested that POSOCO, which is undertaking the functions of National Load Despatch Centre and Regional Load Despatch Centres, is an appropriate authority to regulate the power supply of generating stations on merit order basis and to direct such generating stations or units to divert the power to third parties or through Power Exchange at a price higher than the tariff applicable for sale to the defaulting entities and make

available the surplus power after adjusting the amount due to the generating companies for liquidation of the outstanding PoC charges.

- 11. The petitioner has submitted that the Commission in due recognition of the criticality of the issue of realization of transmission charges has specified the Regulation 25A of the Central Electricity Regulatory Commission (Open Access in inter-State Transmission) Regulations, 2008 (OA Regulations) in which it has been provided that NLDC and RLDC shall not grant short term open access to the entities and associates of such entities who consistently and wilfully default in payment of UI charges, transmission charges and reactive energy charges, etc. The petitioner has submitted that there is a need to strengthen this provision by denying access to these entities for transactions through Power Exchanges and has accordingly suggested to include the words "including transactions through Power Exchanges" in Regulation 25A of OA Regulations. The petitioner has submitted that the trading licensees should not be allowed to 'sell' the electricity to the entities or their associates of such entities who are defaulting in payment of transmission charges and has accordingly suggested incorporation of the word 'sale' in clause (I) of Regulation 7 of the Central Electricity Regulatory Commission (Procedure, Terms and Conditions for grant of trading licence and other related matters) Regulations, 2009 (Trading Licence Regulations).
- 12. In the above background, the petitioner has filed the present petition for seeking appropriate directions and orders to remove difficulty by invoking the provisions of Regulation 20 of RPS Regulations with regard to Billing, Collection and

Disbursement of transmission charges. The petitioner has made the following prayers:

- "(i) Remove difficulties faced by the petitioner in recovery of their dues from the DICs by:
  - (a) Declaring that the respondents are obliged to concur the request of the petitioner/transmission licensee for effective implementation of regulation of power supply in case the DIC fail to pay the transmission dues within the time fixed by the commission.
  - (b) Authorizing NLDC to act as a nodal agency for implementation of power supply regulations keeping in view of the difficulties expressed and possible solutions.
  - (c) Directing the National Load Despatch Centre or a Regional Load Despatch Centre, not to grant open access for sale of electricity from entities and associates of such entities defaulting in payment of transmission charges till the outstanding dues are cleared.
  - (d) Directing all the trading licensees, not to enter into transaction to purchase electricity from the entities and the associates of such entities, defaulting in payment of transmission charge till the outstanding dues are cleared.
- (ii) Pass such order as to remove difficulties as mentioned in the petition."
- 13. Replies to the petition have been filed by POSOCO, NTPC Ltd., NEEPCO, NHPC and SJVNL.
- 14. POSOCO vide its submission dated 25.1.2012 has submitted as under:
  - (a) The power rendered surplus as a consequence of regulation of power supply to a defaulting entity is sold or diverted by the generating company so that there is no generation backing down or water spillage on account of implementation of regulation of power supply.
  - (b) POSOCO has enumerated the following difficulties in implementing regulation of power supply from hydro power stations:

- (i) Generation from hydro depends on water inflows which is variable;
- (ii) Hydro is multi-purpose and it caters to irrigation requirement, drinking water needs, flood control, etc. whereas power generation is generally secondary.
- (iii) Water release has issues relating to riparian laws and ecological balance:
- (iv) Hydro generation is always utilized for load following frequency regulation, meeting peaking requirements, optimization purposes, etc.
- (v) The scheduling of a hydro station is an involved process with provisions of special mechanisms like D+3 adjustments, etc.
- (vi) The energy rate of the hydro station as fixed may be low. However, the perceived value of hydro generation may be very high during low inflows.
- (vii) Hydro generation is generally considered to be non-polluting
- (viii) In case of backing down of generation from hydro station, diversion of water from one project to other is not possible unlike fossil fuel which can be conserved or diverted. This may also result in spillage of water.

- (c) The Sharing Regulations provides that any payment default towards transmission charges will affect all transmission licensees and will be a pan India problem, making regulation of power supply difficult or impractical.
- 15. POSOCO in its submission dated 19.10.2012 filed on behalf of all RLDCs has submitted as under:
  - (a) There are generally no major difficulties in preparing the implementation plan for regulation of power supply to the regulating entity. The power rendered surplus is diverted to buyers/beneficiaries other than the defaulting entity through STOA.
  - (b) There are a few specific difficulties associated with regulation of power supply from hydro generating stations as they are multipurpose projects and these issues have been communicated by POSOCO to the Commission on 25.1.2012.
  - (c) Transmission service is an indivisible and non-transferable public service. Priority may be assigned for payment for common/pooled services like transmission charges, RLDC fees and charges as being done for UI and reactive energy charge payments.
  - (d) Implementation plan for regulation of power supply to a defaulting entity in case of default in transmission charges shall be prepared on receipt of notice from the regulating entity furnishing the source from which the access is to be curtailed along with the quantum and duration of regulation.

- 16. NTPC Limited in its reply dated 18.7.2012 has submitted as under:
  - (a) NTPC never denied the petitioner the facility of regulation of power supply as envisaged by the provisions of the RPS Regulations. However, the petitioner has called upon NTPC to act in a manner which would result in NTPC not recovering the fixed charges payable to NTPC in order to enable the petitioner to recover the outstanding dues and therefore, NTPC would lose payments for no fault or reason attributable to NTPC.
  - (b) Section 56 of the Act, Regulation 25A of the OA Regulations and Regulation 7 (1) of Trading Licence Regulations provide that supply should be curtailed in case of default. Accordingly, the regulation by transmission licensee can be done through denial of STOA /MTOA/LTA to the defaulting utility.
  - (c) Regulation 16 of the RPS Regulations uses the expression 'shall be entitled to sell power rendered surplus due to regulation of power supply to any person'. Regulation 15 provides for decision to be taken by a generating company whose power is to be regulated as it is provided that 'in consultation with the concerned generating company'. The combined reading of the above two provisions clearly suggest that there cannot be any unilateral decision imposed on the generating station as per the decision of the transmission licensee. The object is to allow the parties to decide on the particular generating station by mutual consultation. This is clearly to ensure that the generating company which is coming to the aid of the transmission company to recover its dues does not suffer financially.

- (d) The RPS Regulations need to be interpreted in a purposive and contextual manner. It cannot be interpreted to shift the entire liability of outstanding dues of all the transmission licensees (including private transmission licensees) to NTPC as the petitioner is issuing notices to all transmission licensees for regulation of power supply. The implications of accepting the plea of the petitioner would mean that in addition to NTPC's own billing of approximately ₹70,000 crore, NTPC would be ultimately liable to recover another ₹ 10,000 crore as dues of transmission licensees.
- (e) Regulation of power supply should be guided by the provisions of the respective agreements entered into by the generating company and transmission licensee with their beneficiaries. Since NTPC will be regulating power supply for default in payment of the transmission licensee contrary to the agreements entered into by NTPC with the beneficiaries, it is likely that beneficiaries will dispute such payments. Since NTPC will be ultimately liable to recover entire dues of transmission licensees, NTPC will have no other course but to invoke RBI guarantee. Under such circumstances, PSM provided by the State Govt. in the form of TPA will be under dispute.
- (f) Since the generating company will be regulating the supply of power for default of payment to PGCIL, it has to be indemnified by the petitioner for any loss/ damage/claim by the beneficiaries on similar lines as the generating company is indemnifying POSOCO under the regulation.
- (g) Practically, regulation of power supply is not possible to implement in respect of all the beneficiaries due to technical/ commercial/ legal issues,

which may raise number of disputes before Supreme Court and High Courts as the generating company will be regulating for default of payment to the petitioner and other private transmission licensees.

- (h) The petitioner in consultation with POSOCO can deny STOA/MTOA/LTA to the defaulting utility which can be treated as transmission constraints and the generating station will be declared available. POSOCO may issue schedule to defaulting beneficiary as in case of transmission constraint.
- (i) Clause 16.2 of the TSA provides for various conditions in the events of default which may be invoked in case of non-payment and that DIC shall cease to be a party to TSA as per clause 16.4 of the TSA. Therefore, all inter-State transactions (STOA/MTOA/LTA/bilateral) can be denied to the defaulting DIC under Sharing Regulations. The priority of denial must be STOA followed by MTOA and then LTA.
- (j) Regulation of power supply cannot be enforced only through third party sale as indicated by the petitioner. The following methodology is being adopted in PJM to regulate the defaulters:
  - (i) Defaulting member will be unable to buy or sell in any PJM market.
  - (ii) Defaulting member shall not be entitled to participate in the activities of any committee or body assembled by the Members Committee of PJM or vote on any committee or body.

- 17. NEEPCO in its reply dated 18.7.2012 has submitted as under:
  - (a) Since operation of NEEPCO's hydro generating stations is dependent on availability of water, during periods of low water availability operation of these stations is restricted and uncertain. Therefore, regulation from the hydro generating stations during periods of low water availability is not feasible.
  - (b) Regulation of power supply from the gas based power stations is not considered to be economically prudent due to operational difficulties for NEEPCO's gas based power plants.
- 18. SJVNL vide its reply dated 27.8.2012 has submitted that SJVNL regulated the power supply of BRPL as per the provisions of RPS Regulations on account of non-payment of outstanding dues by defaulting entities. SJVNL has submitted that it is bound by the terms and conditions of the PPA signed with the beneficiaries. In case of regulation of power supply by transmission licensee, the beneficiaries may create disputes in releasing payment of SJVNL current dues as well as outstanding dues.
- 19. NHPC in its reply dated 30.7.2012 has submitted as under:
  - (a) NHPC had resorted to regulation of power supply to recover the outstanding dues from the defaulting entities.
  - (b) While enforcing the regulation of power supply, NHPC had faced some problems in implementing certain provisions of RPS Regulations and it was found that there was a necessity to clarify/amend some provisions of the regulations.

- (c) The contention of the petitioner that a meagre amount of ₹2.18 crore has been received from NHPC on account of concurrent regulation of power supply to BRPL, BYPL and UPPCL shows that NHPC has co-operated in concurrent regulation for recovery of outstanding dues of the petitioner from the defaulting beneficiaries. The outstanding dues to the tune of ₹ 748 crore as mentioned by the petitioner in para-6 of the petition should be recovered from the defaulting entities through regulation of power supply of the generating stations which supply the major share of allocated power to the defaulting entity.
- (d) With regard to sharing of surplus revenue in the ratio of outstanding dues of generator and transmission licensees as per RPS Regulations, transmission licensees should first calculate the quantum and duration of regulation of power supply based on estimated price of Power Exchanges/traders which implies that the outstanding dues to be recovered by the transmission licensees through regulation of power supply from generating stations will be different from one stage to another and will not remain the same during the entire period of regulation. Therefore, the additional revenue earned should be shared in the ratio of outstanding dues of transmission licensees on *pari passu* basis as calculated above vis-à-vis the outstanding dues of generating company.
- (e) Hydro generating stations being the cheapest power may fall in the high risk of repeated regulation of power supply. Hydro generating stations having the lower energy rate and seasonal power generation may take longer time to

- recover the dues and they also support the peak load in grid and using them repeatedly for regulation of power supply may affect grid stability.
- (f) With regard to the petitioner's contention regarding non-cooperation of NHPC for regulation of power supply of some defaulting beneficiaries, NHPC has clarified that share of power supply to UPPCL from NHPC power stations was regulated w.e.f. 22.2.2012 which was subsequently withdrawn w.e.f. 16.4.2012 after an agreement for liquidation of outstanding dues was signed between NHPC and UPPCL. Similarly, regulation notices were issued in other cases also.
- 20. The petitioner in its rejoinder dated 23.8.2012 to the reply of NTPC has submitted as under:
  - (a) With regard to the contention of NTPC that it has never denied the facility of regulation of power supply as per the RPS Regulations, the petitioner has submitted that NTPC has never consented to enforce the regulation of power supply against the defaulting entities on one or the other pretext, thereby disabling the petitioner to recover its dues. The petitioner has never been successful in implementation of regulation of power supply from NTPC generating stations due to non-cooperation by NTPC. The petitioner has submitted that it has never asked NTPC to act in a manner which might cause monetary loss to it.
  - (b) The petitioner, as a transmission utility, cannot cut off the supply of electricity or disconnect any electric supply lines to recover its dues as it affects the grid

security as well as the supply of electricity. Since the Commission was aware of such difficulties, while farming RPS Regulations, the Commission devised a different mechanism to ensure liquidation of dues of the defaulting utilities by requiring reduction of the drawl schedule in case of the generating company or withdrawal of open access to ISTS.

- (c) The interpretation of Regulation 16 of the RPS Regulations as made by NTPC would frustrate the purpose and objective of the said Regulations. As per the provisions of the Electricity Act, 2003, the transmission company cannot engage in the business of trading which has been defined as purchase of power for the purpose of sale thereof. However, such restriction does not apply to the generating company. NTPC, as a generating company has the authority to generate and sell the power and can share proceeds of sale of the regulated power with the transmission licensee. Accordingly, RPS Regulations has set out a mechanism for recovery of dues of the transmission licensee which is possible only when the generating company consents to cooperate with the endeavour of the petitioner to enforce the recovery of the outstanding dues from the defaulting entities in accordance with the provisions of the RPs Regulations.
- (d) Keeping in view the instances of non-cooperation by the generators in implementation of regulation of power supply to defaulting utilities, it is necessary to put in place suitable measures to protect the interest of ISTS transmission network which presently operates as common pool service and serve the purpose of public utility in contrast to bilateral commercial

arrangements between the generator and other users. Keeping the aforesaid in view, it is necessary that payment of transmission charges should be made first along with the charges of Implementing Agency (RLDCs). This would result in healthiness of transmission licensees whose charges are being collected and disbursed by CTU as per Sharing Regulations and BCD Procedure made thereunder.

21. PGCIL in its rejoinder dated 23.8.2012 to the reply of NHPC has submitted that NHPC had issued notices to the defaulting entities for regulation of power supply for recovery of its dues. The petitioner, wherever possible, availed the opportunities for concurrent regulation with NHPC. However, NHPC deferred/withdrew the notices unilaterally after getting some payment/assurance from the defaulters without taking consent of the petitioner. As such, it is necessary that in such situations, the concerned generator should continue with the regulation of power supply till such time the requirement of regulation exists as per the transmission licensee. With regard to NHPC's suggestions/comments on various provisions of RPS Regulations, the petitioner has submitted that while considering these suggestions, the statutory position of transmission licensees not being permitted to be engaged in trading of power as per the Electricity Act, 2003, should be considered and taken into consideration.

## I.A. No. 7/2013

22. NTPC has filed IA. No. 7/2013 in the present petition seeking directions to PGCIL to consult NTPC before deciding NTPC stations and their quantum for regulation of power supply and ensure technical minimum generation schedules at

all the stations chosen for regulation of power supply at the behest of PGCIL/CTU/transmission licensee.

# 23. NTPC has made the following prayers:

- "(a) Direct PGCIL to necessarily consult NTPC before deciding NTPC stations and their quantum for regulation of power supply.
- (b) Direct NRLDC and PGCIL to ensure technical minimum generation schedules at all the stations chosen for regulation of power supply at the behest of PGCIL/CTU/Transmission licensee.
- (c) Decide a methodology to ensure that recovery of fixed charges by the generating company be accorded higher priority as brought out at Para 28.
- (d) Direct RLDC/ NLDC to ensure that before curtailment of LTA in case of default of distribution companies, STOA & MTOA to be curtailed first.
- (e) Devise a mechanism to facilitate easy sale of surplus power, both within and outside the region with quick and easy to implement procedure for the same."

## 24. NTPC in the IA has further submitted as under:

- (a) PGCIL did not consult NTPC while deciding the generating stations and the quantum to be regulated which was necessary to ensure that the generator's operation, safety and flexibility are not compromised. PGCIL in its various letters has mentioned that NTPC was telephonically informed regarding issuing notices to the defaulting entities for regulation of power supply. The basis of deciding the quantum of regulation and the generating stations from where power is proposed to be regulated in the said notices has not been indicated. The list of generating stations, the order in which they have been chosen or the quantum from individual stations appear to be arbitrary and have been decided in a non-transparent manner.
- (b) The Oxford Dictionary defines the words 'Consultation' as 'an act of

discussing something with somebody or with a group of people before making a decision about it' and 'Discussion' as 'a detailed conversation about something that is considered to be important'. The consultation is a discussion which is required before making a decision about it. In the present case, no such consultation and/ or discussion has been carried out by the petitioner to choose generating stations of the generating company.

- (c) Power rendered surplus due to the regulation of power supply to BRPL and BYPL was consented by Rajasthan. However, the same was not scheduled by NRLDC who insisted for open access. The Commission vide order dated 11.1.2010 in Petition No. 134/2009 has decided that scheduling of power from one beneficiary to another beneficiary of a generating station would be treated as reallocation of power on temporary basis and would not be treated as open access transaction.
- (d) PGCIL and NRLDC have not complied with the provisions of Regulation 6.5.14 of the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010 (Grid Code) to ensure technical minimum for NTPC's generating stations. NRLDC should have prepared an implementation plan considering the technical minimum requirement of NTPC's generating stations instead of merely following up the notices of PGCIL 'as it is'.
- (e) During ongoing regulation of power supply to BRPL and BYPL at the behest of the petitioner since 26.2.2013, schedule given by NRLDC to Dadri-II on most occasions has been below the technical minimum requirements. The

situation could very well have been addressed by properly allocating the quantum of regulation of power supply among various stations in consultation with NTPC which was not done.

- (f) As the regulation of power supply is being enforced by the petitioner for recovery of its outstanding dues, it is imperative that the petitioner needs to facilitate sale of power rendered surplus through regulation. With regard to regulation of power supply to BRPL and BYPL, NTPC arranged for sale of regulated power to the distribution companies of Rajasthan which was informed to the petitioner too. However, this sale was not implemented by NRLDC.
- (g) The petitioner and POSOCO are now shifting the responsibility on each other to ensure technical minimum schedules of the generating stations chosen by the petitioner for regulation of power supply, without taking any action to resolve the issue.
- (h) Regulation 16 of the RPS Regulations provides for payment to transmission licensee prior to recovery of fixed charge of the generating company. NTPC is incurring UI/ fuel losses for running its generating stations at technical minimum in the absence of schedule. NTPC is also suffering loss in efficiency at its generating stations due to partial loading on account of regulation of power supply.
- (i) NTPC incurs fuel cost, consumables and stores, security expenses, water charges and employee cost etc. in running and operating the power stations for

which it has to necessarily make payments to its suppliers and service providers for ensuring that a power plant comprising 40,000 moving components keep running besides ensuring interest payments to its lenders. The per unit charges incurred by a transmission service provider is around 20% of fixed charge and less than 10% of total charges of NTPC's generating stations.

- (j) NTPC should be allowed to first recover its fixed charge and variable charges and the surplus left, if any, should be passed on to the regulating entity from the amount it realizes from sale of the regulated power. After receiving the capacity charges, corresponding to the regulated power from the defaulting/ regulated entity, the surplus fixed charges received should be passed on to the regulating entity i.e. PGCIL.
- (k) The dispute now being raised by the regulated entity (i.e. BRPL in this case), may eventually lead to non-recovery of full fixed charges of the generating company for the quantum of power under regulation from NTPC's generating stations for the reasons not attributable to the generating company and for the reason that NTPC went ahead in cooperating with the regulating entity, i.e. PGCIL.
- (I) Defaulting entities i.e. BRPL and BYPL continue to use transmission corridors of the petitioner under STOA inspite of denial of Long Term Open Access to them from the NTPC's generating stations.
- (m) While generation at NTPC stations is being made to suffer due to default of

BRPL and BYPL in making payment to the petitioner, it is noticed that the petitioner continues to extend its transmission system to them for transacting (buying and selling) power under STOA, rendering the effect of regulation of power supply unviable. The Commission may issue directions to PGCIL that before withdrawal of LTA of the defaulting entity, STOA and MTOA should be curtailed first and only thereafter, LTA should be curtailed in case of continued default.

- 25. The petitioner in its reply dated 7.5.2013 to the IA has submitted as under:
  - (a) PGCIL had issued notice dated 11.2.2013 to BRPL and BYPL for regulation of power supply with a condition that in case BYPL and BRPL do not make payment of outstanding dues and do not open requisite LC by 21.2.2013, regulation of power supply shall be implemented from 26.2.2013. In the notice, the quantum of power to be regulated and source from which power to be regulated was given.
  - (b) Quantum of power to be regulated and the name of the generating station from where power was proposed to be regulated was decided on the basis of information obtained from NLDC regarding cheaper sources of power and allocation of power to respective defaulting utilities obtained from Regional Transmission Accounts (RTA). The petitioner has taken into consideration the provisions of RPS Regulations while issuing notices for regulation of power supply.
  - (c) The petitioner never advocates compromising on the technical minimum

requirements of any generating station during implementation of regulation of power supply.

- (d) Subsequent to RPS Regulations to BRPL, BYPL and UPPCL, the petitioner intended to issue notice to Jammu and Kashmir for default in making payment of outstanding dues. At the time of consultation, NTPC informed that its generating stations should be considered only after RPS Regulations to BRPL and BYPL is withdrawn. Considering the request of NTPC, the petitioner did not include any of the generating station of NTPC while issuing notice to J&K.
- (e) With regard to NTPC's contention that it will ultimately be liable to recover ₹10,000 crore dues of various transmission licensees. The petitioner has submitted that RPS Regulations has been carried out only for a small quantum of power in respect of BRPL, BYPL and UPPCL which too have been withdrawn in all cases. Presently, there are 72 DICs and power of no DIC is under regulation.
- (f) The petitioner is in agreement with NTPC's suggestion that STOA/MTOA of defaulters should be denied prior to regulating their LTA. PGCIL has requested for modification in the concerned regulations so that while issuing notice to defaulting entities for RPS Regulations, their right to trade through short term transactions would stand suspended simultaneously.
- 26. NTPC vide its rejoinder dated 23.9.2013 to the reply of PGCIL on the IA has submitted as under:
  - (a) The petitioner's contention that regulated power was not sold or there was

any lack of effort on the part of NTPC to sell the regulated power is not correct.

- (b) NTPC took up with all the beneficiaries for sale of power rendered surplus due to regulation by the petitioner. NTPC has submitted that the petitioner issued notice for RPS Regulations from 26.2.2013 for 4 months which was withdrawn within 2 months from 13.4.2013 due to arrangements entered with the defaulting entities and regulating entity which implies that due to notice for RPS Regulations, the petitioner was able to recover its charges, implying that regulation was effective.
- (c) RLDC may finalize the quantum while finalizing implementation plan so that the schedules are operationally feasible and reasonable as provided in the Grid Code.
- (d) A sale cannot be made mandatory. Sale is possible only when buyers and sellers reach an agreed price and other terms and conditions of the contract.
- 27. During the hearing on 28.5.2013, the representative of NTPC submitted that subsequent to the filing of IA, NTPC and PGCIL have agreed on the consultation process to be followed in future for the purpose of RPS Regulations. The petitioner has also agreed that the quantum of regulation shall be chosen in such a manner that NTPC stations would not be required to be scheduled below their technical minimum level. It was agreed that in case of RPS Regulations, all forms of access to the regulated entity i.e. STOA, MTOA and LTA need to be curtailed in case of non-payment of dues so that the RPS Regulations is effective. On the issue of sale of

regulated power to third parties, there are issues in case of thermal generating stations like implication of UI, etc., which need to be resolved. He further submitted that the provisions of Power Supply Regulations do not specifically provide for certain issues relating to UI implementation. The UI in such cases should also be chargeable under incidental expenses.

- 28. The representative of the petitioner submitted that after discussion, broad agreements have been reached between NTPC and PGCIL with regard to RPS Regulations. He further submitted that views of CEA should be obtained on the issue of technical minimum. The representative of the petitioner submitted that the whole purpose of RPS Regulations will be defeated if drawal of power is allowed through short term open access. He suggested that short term open access should be curtailed for achieving effective implementation of RPS Regulations and the defaulting entity should not be allowed to draw power through short term transactions.
- 29. The Commission through Record of Proceedings for the hearing held on 28.5.2013, directed the Central Electricity Authority (CEA) to submit its views on technical minimum for thermal generating station. NTPC was also directed to discuss the matter with PGCIL, POSOCO and staff of the Commission to resolve the outstanding issues and submit the outcome of the discussion.
- 30. NTPC in its submission dated 4.10.2013 on technical minimum has submitted as under:
  - (a) Coal based generating stations have been envisaged to meet the base load

requirement in the country. From the beginning, NTPC's thermal generating stations have been designed and engineered for operation as base load power plants. The normative operational parameters for tariff determination like heat rate, auxiliary power consumption and specific secondary fuel oil consumption have also been fixed based as per actual when these stations were operating as base load stations and fixed cost recovery is based on 85% availability.

- (b) Based on the experience of operating power plants for over 31 years since commissioning its first 200 MW unit at Singrauli, it has been assessed that scheduling at less than 70% load levels would affect the reliability, efficiency and economy of operation. In the long run, due to cyclic load fluctuation which in turn would also cause the operational parameters to vary would have an adverse impact on the machine health and life. Operation of machines under such conditions would be detrimental to the national interest including the interests of beneficiaries and the generators. Almost 30 year old stations like Singrauli and Korba are still running at high efficiency levels with minimum expenses on R&M mainly because of high loading factors of the units over the years. As per the estimates of CEA, around ₹ 2.5 crore/MW would be presently required for R&M on BTG for extending life of the power stations. NTPC has been able to avoid such high expenses only because of maintaining loading factors of the machines (above 70%) during their life periods.
- (c) Although in the technical specifications for the BTG supplier, normally the

power generators including NTPC put 30% of BMCR as the limit for stable operation which is generally used for a performance guarantee test in a new boiler under controlled /ideal conditions with designed fuel, the same cannot be ensured over the life of the plant as normal operating conditions will vary from ideal/controlled operating environment. This becomes more difficult to replicate in case of old boilers.

- (d) CEA in its document regarding 'Standard technical specifications for Sub-Critical Thermal Power Project-(2x500 MW or above) Main Plant Package' has mentioned 40% BMCR as the minimum load without oil support for flame stabilization. However, the operating conditions mentioned for achieving the same such as adjacent mills in service and mill load not less than 50% of its capacity etc. points to the severely limited conditions in which this is possible. However, the actual operating conditions are more complex and different and it would not be possible to achieve the same in real time of prevailing operating conditions. Added to this, there is uncertainty introduced due to the variation in coal quality actually supplied from the design coal specified in the technical specifications.
- (e) Though 40% unit loading is demonstrated as part of the PG test for a short period of time under controlled/ ideal conditions, these ideal conditions cannot be maintained for longer period of time. In practice some margins are required to have operational flexibility to take care of credible contingencies such as non-availability of continuous elevation mills/feeders, poor quality of coal, tripping of some auxiliaries, operating activities such as soot-blowing. From

the operational experience, it has been seen that below 70% loading, sustained stabilized operation of unit would not be possible.

- (f) The power plant specifications for procurement of main plant package are generally similar to the specifications prescribed by CEA and the OEM suppliers would normally demonstrate the operation at around 40% of BMCR for short duration as part of the PG test during the prescribed guarantee period. However, there is no reliable data either with OEMs or with CEA which shows that the thermal units can sustain reliable operation at such low loads without any interruption or without any oil support. In the "Report of the Committee to study Design features of Boiler and Auxiliaries being sourced from Chinese manufacturers" undertaken by CEA and published in 2008, the following has been acknowledged:
  - "(ii) Secondary fuel oil consumption has been found to be high in all the three projects. It was observed that oil is being fired as a support fuel in the boiler even upto 80% load which normally should have been withdrawn at 40-50% load. This kind of operation is being resorted to from the point of view of saving the unit from shut down due to flame failure on account of bad quality of coal having very high ash content and moisture."
- (g) Even though no specific study has been done for non-Chinese units, it is experienced that the flame is unstable at loads less than 70% level.
- (h) Continuous partial load operation without oil support increases the likelihood of unit tripping on flame failure which may also endanger grid security.
- (i) Impact of Plant operation below 70% loading:
  - A. Coal Stations (200 MW/500 MW):

- (i) Reliability & stability of operation gets affected
- (ii) Faster Boiler tube metal degradation resulting in tube leakage
- (iii) Affects Efficiency and Economy of Operation severely
- B. Gas Stations
- (i) Reliability of operation gets affected as transient overheating damages super-heater tubes in HRSG and deformation of turbine casing is observed
- (ii) Affects Efficiency and Economy of Operation severely as it results in increased CO2 emission and increased cost of generation.
- (j) In the 56th Operation Coordination Committee's meeting held on 11.11.2010, the issue was discussed and relevant portion of the discussion is extracted as under:

"GM, NRLDC stated that due to prevailing high frequency condition in the grid the central sector units were required to back down. While backing down following criteria were generally adopted:

	Technical Minimum loading (% of full load		Remarks
Type of m/c	Normal condition	Extreme condition	Units to be closed down in case not feasible to run at
Thermal	70%	60%	low generation limit
Gas Station	60%	50%	

GM, NRLDC further added that in case any unit is closed down as per NRLDC instruction, the machine was usually revived only after 24 Hrs in consultation with generating stations. He also requested SLDC to adhere to their drawl schedule and back down their generation when required.

Representative of NTPC requested NRLDC that in case of GAS Turbines the schedule should be in the band of 80% to 100% for normal condition of running machine capacity and not less than 70% of running machine capacity, and in extreme grid condition 60% could be accepted for a short duration only. NTPC stated that the above criteria had been fixed as per

earlier decision of NRPC meeting held on 6th November, 1998."

- (k) NTPC has submitted that the minimum technical limit of operation for thermal generating stations should be considered as 70%.
- 31. CEA vide letter dated 12.9.2013 has submitted its views on technical minimum of thermal units as under:

"The control range for coal fired units is generally taken as 50% to 100% MCR and the rated steam temperatures can be maintained in this range. However the units can operate at any lower load without any limits; and minimum load without oil support is taken as about 30% MCR and operation below this limit needs oil support. The CEA Technical Standards for Construction of Electric Plants and Electric Lines Regulation -2010 prescribe a control load of 50% MCR. The operating capability generally specified in the technical specifications also stipulates continuous operation without oil support above 30% MCR load and control load range of 50% to 100% TMCR.

- 2. Thus unit operation may be envisaged as indicated above, barring any specific operating constraints brought out or recommended by the OEMs with proper technical justification."
- 32. NTPC vide its affidavit dated 25.11.2013 has submitted that as per the Commission's direction, NTPC discussed the matter with PGCIL and NRLDC on several occasions to resolve outstanding issues. On 22.10.2013, NTPC and PGCIL have reached an understanding on the outstanding issues with regard to RPS Regulations to defaulting entities. Broad contour of the understating are as under:-
  - (a) In case of DIC's default on account of transmission charges or establishment of LC, PGCIL (CTU) shall inform its intention to the generating company to regulate the power supply of the defaulting DIC along with tentative quantum of power, source and duration.
  - (b) The generating company will inform about the minimum generation to be maintained in respect of each of its proposed generating stations on account

of technical minimum requirements and margin related to change in scheduling. The RPS Regulations by PGCIL will not extend below such level. The generating company may also suggest modification in source and quantum of power for the purpose of RPS Regulations.

- (c) Based on the inputs from the generating company, PGCIL will review and revise the quantum of power source and distribution of power to be regulated. In this regard, a formal notice for RPS Regulations shall be issued by PGCIL to the defaulting DIC in line with the provisions of Power Supply Regulations, with a copy to the Commission, the Nodal Agency and the concerned generating company. The Nodal agency will then decide the quantum of power to be regulated from various generating stations for implementation, considering relevant aspects of grid security.
- (d) The regulated power may be offered by the generating company for third party sale through temporary reallocation via RLDC/Power Exchange/short term provided the third party agrees to the terms and conditions of short term availability of power. If the power is to be made available for sale through short term/Power Exchange, there could be an incidence of additional UI Charges as compared to bilateral sale of power as there would be no opportunity for the generating company to revise the schedule after four time blocks in case of tripping or forced outage. It was suggested that the UI charges exposure in such cases, due to RPS Regulations, may be allowed to be recovered as a part of incidental expenses of generating company on priority from the proceeds of sale of regulated power. The principle for

distribution of sale proceeds, after adjustment as per above, shall be as decided by the Commission.

## **Analysis and Decision:**

33. We have considered the submissions of petitioner, respondents, POSOCO and CEA in regard to prayers of the petitioner in the main petition and of NTPC in I.A No.7 of 2013. During the course of hearing on 28.6.2012, learned senior counsel for the petitioner submitted that the petitioner is not pressing for the prayers at para 22 (i) (b) and (c) of the petition and sought appropriate directions on the remaining prayers. Based on the request of the learned senior counsel for the petitioner, we are not dealing with prayers (b) and (c) of the petitioner. Remaining prayers in the main petition i.e. prayers (a) and (d) and the prayers of NTPC made in the IA have been dealt with in the succeeding paragraphs.

Prayer (a) of the petition: Declaration that the respondents are obliged to concur the request of the petitioner/transmission licensee for effective implementation of regulation of power supply in case the DIC fail to pay the transmission dues within the time fixed by the Commission.

34. In context of this prayer, the petitioner has submitted that the selection of the generating stations for effective RPS Regulations is necessarily to be on least cost generation units on merit order basis as provided in the Power Supply Regulations. Such selection of generating company and the particular generating unit has not been possible in the past by mutual consultation between the petitioner and the respondent generating companies as respondents have not provided consent under the regulation to the petitioner for number of reasons numerated by them, except in case of concurrent regulation where respondents have also decided for implementation of RPS Regulations of some DICs. The petitioner has submitted that

during consultation process, some of the generating companies insist on many conditions, such as, establishment of cheapest source of power and regulation of such cheapest source of power first, finding alternate buyers for regulated power, calculation for arriving at the quantum along with expected selling price, indemnifying generating companies for any disputes raised by customers with whom PPA is signed and compensating the generating stations for loss of efficiency which are difficult to be fulfilled by a transmission company. NTPC and NHPC have submitted that they had cooperated with the petitioner whenever the petitioner had sought to regulate power supply to defaulting entities on account of non-payment of transmission charges. NTPC has submitted that the consultation by the transmission licensee should be effective consultation with the generator with regard to the choice of the generating station to be regulated and the quantum and duration of regulation of power from these generating stations. Another point of contention is that the thermal generating stations insist on RPS Regulations from the hydro generating stations which are resisted by the hydro generating company on the ground that hydro power being the cheapest run the risk of repeated regulations. Moreover, hydro generating stations support peak load in the grid and using them repeatedly for RPS Regulations would affect the grid security.

35. In view of the rival submission of the petitioner and respondents, it is necessary to first examine the statutory provision for RPS Regulations in the event of non-payment of transmission charges by a defaulting entity to the transmission licensee. Regulation 15 of RPS Regulations provides as under:

"15. On the request of a Transmission Licensee for Regulating the power supply, the Regional Load Despatch Centre may, under intimation to the concerned generating company, curtail the medium-term open access or long-term access of the allocated power or power supply contracted by the Defaulting Entity, on account of regulation

according to the notice served under Regulation 4 of these regulations, preferably from the cheapest generating station in that corridor. The Regulating Transmission Licensee may decide the quantum and duration of denial of open access/ access in consultation with any of the concerned generating companies who have a contract to sell power to the Regulated Entity and the concerned Regional Load Despatch Centre. The Transmission Licensee can propose the quantum and duration of regulation of power supply based on an estimated price, indications of which can be taken from the Power Exchange Uniform Market Clearing Price and the prevailing price of electricity sold through traders directly."

- 36. As per the above provision, the transmission licensee has to first take a decision with regard to RPS Regulations to a defaulting entity and make a request to the concerned RLDC. RLDC after intimation to the concerned generating company will curtail the long term access or medium term open access of the entity sought to be regulated. The guiding factor for RLDC is that it has to regulate preferably the cheapest generating station in the concerned corridor. Therefore, the regulation does not envisage about prior consultation with the generating company with regard to a particular generating station, supply of power from which would be regulated. Consultation has been provided with regard to the quantum and duration of denial of open access to the regulated entity. NTPC has submitted that there should be effective consultation. The question therefore arises as to whether the term 'consultation' can be interpreted as 'concurrence' or 'consent' of the concerned generating station for regulation of power supply in terms of RPS Regulations. The Hon'ble Supreme Court in the case of Indian Administrative Service (SCS) Assn., UP Vs Union of India [1993 SCW 1135] has explained the scope of the term 'consultation' as under:
  - "(1) Consultation is a process which requires meeting of minds between the parties involved in the process of consultation on the material facts and points involved to evolve a correct or at least satisfactory solution. There should meeting of minds between the proposer and the persons to be consulted on the subject of consultation. There must be definite facts which constitute foundation and source for final decision. The object of the consultation is to render consultation meaningful to serve the intended purpose. Prior consultation in that behalf is mandatory.

- (2) When the offending action effects fundamental rights or to effectuate built in insulation, as fair procedure, consultation is mandatory and non-consultation renders the action *ultra vires* or invalid or void.
- (3) When the opinion or advice binds the proposer, consultation is mandatory and its infraction renders the action or order illegal.
- (4) When the opinion or advice or view does not bind the person or authority, any action or decision taken contrary to the advice is not illegal, nor becomes void.
- (5) When the object of the consultation is only to apprise of the proposed action and when the opinion or advice is not binding on the authorities or person and is not bound to be accepted, the prior consultation is only directory. The authority proposing to take action should make known the general scheme or outlines of the actions proposed to be taken, be put to notice of the authority or the persons to be consulted; have the views or objections, taken them into consideration, and thereafter, the authority or person would be entitled or has/have authority to pass appropriate orders or take decision thereon. In such circumstances it amounts to an action 'after consultation'.
- (6) No hard and fast rule could be laid, no useful purpose would be served by formulating words or definitions nor would it be appropriate to lay down the manner in which consultation must taken place. It is for the Court to determine in each case in the light of its facts and circumstances whether the action is 'after consultation'; 'was in fact consulted' or was it a 'sufficient consultation'."

In our view, the requirement of 'consultation' under Regulation 15 of the Power Supply Regulations is covered under para 5 of the judgment quoted above, since the consultation is not with regard to regulation of power supply from a particular generating station but only with regard to the quantum and duration of power supply identified by the RLDC from amongst the cheapest generating stations in the corridor. In our view, it would amount to an action 'in consultation' with the generating company if the transmission licensee informs the generating company well in advance about the transmission licensee's plan to regulate the power supply to the defaulting entity, along with the name of the identified generating station(s), tentative quantum and duration of regulation of power supply, keeping in view the technical minimum requirement of the thermal generating unit. Based on the feedback received, the transmission licensee shall decide the quantum and duration

of regulation of power supply from the identified generating station(s) and intimate the same to the concerned RLDC. It is pertinent to note that based on our suggestions during the hearing to sort out the matter through discussion, NTPC and PGCIL have discussed the issue on 22.10.2013 and have agreed on certain proposal for implementation of RPS Regulations which have been extracted in subpara (a) to (d) of para 32 of this order. The only issue on which a decision is required to be taken is as to whether the incidence of additional UI charges accruing on account of sale of regulated power at the power exchange shall be recoverable as part of incidental expenses of the generating company out of the sale proceeds of such power. As the UI charges will be incidental to the sale of power at the power exchange on account of the restriction on revision of schedule as per the open access regulation, we are of the view that the generator should not be made to suffer on this account and the additional UI charges, if any, should be permitted to be recovered as incidental expenses under Regulation 16 of the RPS Regulations. However, where UI charges are receivable by the generator, the same shall be included in the sale proceeds of the regulatory power and applied in accordance with Regulation 16 of the RPS Regulations. The petitioner may formalize similar arrangements with other generators so that regulation of power supply is implemented smoothly whenever the petitioner is required to resort to the same.

37. With respect to impact of UI due to tripping of unit during the sale of such power during regulation of power supply, it is noted that this situation is being envisaged by NTPC as revision of schedule is allowed as per Regulation 6.5.19 of Grid Code in case of unit tripping for short term sale under bilateral transaction and same is not allowed for collective transactions. During the period of regulation of

power supply, NTPC has the option to sell power rendered surplus on account of such regulation first as URS, then under bilateral transactions and thereafter, under collective transactions. As the regulation of power supply is done starting from cheapest power, it would be possible to sell power under URS. The probability of occurrence of the problem envisaged in case of collective transactions will be very small. In case, any such incident happens in future which leads to any UI implication, the same shall be examined for appropriate decision at that point of time.

- 38. With regard to the contentions of NHPC and NEEPCO that (a) regulation from hydro generating stations is not feasible, (b) regulating power from only the cheapest power stations is not effective as mostly hydro stations tend to be cheapest in the merit order, (c) these hydro stations having lower energy rate and seasonal power generation will take longer time to recover the dues, we are of the view that issue of regulation of power supply may be seen from the perspective of the entity whose dues are to be recovered. Regulation 18 of Power Supply Regulations provides for regulation of power supply by transmission licensee as under:
  - "18. During regulation of power supply, through a hydro generating station, in order to avoid spillage of water, if a buyer cannot be found or is not found for the full quantum of power rendered surplus, the generating station can inject power under Unscheduled Interchange (UI) mechanism, if grid conditions allow, with the permission of the Regional Load Despatch Centre in which it is located, subject to the stipulations in the Central Electricity Regulatory Commission,(Unscheduled Interchange charges and related matters) Regulations, 2009, as amended from time to time. The loss of energy charge, in case of spillage of water, shall be made good from the revenue earned through sale of power and/or UI from injection of power rendered surplus due to regulation, on first charge, and the balance amount shall be adjusted in accordance with Regulation 16."
- 39. Regulation 15 provides that power supply would be preferably from the cheapest generating station in that corridor. According to POSOCO, hydro generating station is often used for load following frequency regulation and peaking

requirement. In case of backing down of generation from hydro generating station, diversion of water from one project to another is not possible unlike the case of fossil fuel which can be conserved or diverted and it may also result in spillage of water. We are of the view that RLDC after considering the seasonality of operation of the hydro generating stations, spillage of water, safety and security of the grid and the principle of economic dispatch shall suggest to the regulating transmission licensee whether to regulate or not to regulate power supply from the unit(s) of the hydro generating station. In case, concerned RLDC advises the regulating transmission licensee not to regulate the power supply of the suggested hydro generating station, the regulating transmission licensee shall select other hydro generating station or the thermal generating station for the purpose of regulation of power supply.

Prayer (d) of the petition: Directing all trading licensees, not to enter into transaction to purchase electricity from the entities and the associates of such entities, defaulting in payment of transmission charge till the outstanding dues are cleared.

- 40. The petitioner has requested to direct all trading licensees not to enter into transaction to purchase electricity from the entities who default in making payment of transmission charges and other charges. However, the petitioner has not placed any data on record which show whether the traders are buying power from such regulated entities who default in payment of transmission charges. In the absence of any data, direction to trading licensees not to purchase electricity from the defaulting entities is unlikely to yield any substantive results. However, the petitioner is directed to submit the date in this regard for consideration of the Commission.
- 41. The petitioner in para 20 of the petition has suggested for amendment of Regulation 25A of Open Access Regulations to include the words "the transactions

through Power Exchanges" in order to deny the regulated entity the facility to transact on the Power Exchange. In this connection, it is clarified that through second amendment to the Open Access Regulations, the Commission has already inserted the words "including transaction through Power Exchange' in Regulation 25A and accordingly, grievance of the petitioner has been addressed. As regards the suggestion to insert the word 'sell' in Regulation 7A of the Trading Licence Regulations, it is pertinent to mention that the same was proposed through second amendment to the Trading Licence Regulations. However, based on the comments received from the stakeholders, the Commission dropped the proposed amendment. In this connection, para 37 of the Statement of Reasons to the Second Amendment to the Trading Licence Regulations is extracted as under:

"37. We have considered the suggestion/objections as noted above. The largest buyers of electricity from the trading licensees are the distribution companies. On account of default of payment of various charges by the distribution companies, it was proposed to deny them access to trade so that these distribution companies are forced to make payment of transmission and other charges in order to avail the facility of buying or selling power from trading licensees. We have reconsidered our views in the light of the responses received. For the default of the distribution companies, the traders should not be made to suffer, particularly when the traders are prepared to take the risk of delay or default in payment. For recovery of transmission charges and other charges, the Commission has specified the Central Electricity Regulatory Commission (Regulation of Power Supply) Regulations, 2010 and recourse should be taken by the transmission licensees including PGCIL for recovery of various charges. We have decided to drop the proposed amendment to clause (I) of Regulation 7 of the 2009 Trading Licence Regulations."

In view of the above decision of the Commission, the prayer of the petitioner for amendment of Regulation 7A of Trading Licence Regulations cannot be agreed to at this stage.

Prayer (a) of NTPC in IA: Direct PGCIL to necessarily consult NTPC before deciding NTPC generating stations and their quantum for regulation of power supply.

42. The grievances projected by NTPC in this prayer have been dealt in para 36 of this order.

Prayer (b) of NTPC in IA: Direct RLDCs and PGCIL to ensure technical minimum generation schedules at all the stations chosen for regulation of power supply at the behest of PGCIL/CTU/ transmission licensee.

- 43. NTPC has prayed that scheduling at less than 70% load levels would affect the reliability, efficiency and economy of operation. In the long run, due to cyclic load fluctuation which in turn would also cause the operational parameters to vary would have an adverse impact on the machine health and life. Almost 30 years old stations such as Singrauli and Korba are still running at high efficiency levels with minimum expenses and R&M, mainly because of high loading factors of the units over the years. Although in the technical specification for the BTG supplier normally the power generators including NTPC put 30% of BMCR as the limit for stable operations, this limit is generally used for a performance guarantee test in a new boiler under controlled/ideal conditions with designed fuel and cannot be ensured over the life of the plant as normal operating conditions will vary from ideal/controlled operating environment.
- 44. To take a holistic view on the issue, the Commission during the hearing on 28.5.2013 directed CEA to submit their considered views on technical minimum for thermal generating stations. Accordingly, CEA vide letter dated 12.9.2013 submitted that control range for coal fired units is generally taken as 50%-100% MCR and the rated steam temperatures can be maintained in this range. However, the units can operate at any lower load without any limits; and the minimum load without oil support is taken as about 30% MCR and operation below this limit needs oil support. According to CEA, the Central Electricity Authority (Technical Standards for

Construction of Electric plants and Electric Lines) Regulations, 2010 provides for control load of 50% MCR. The operating capability generally specified in the technical specifications also stipulates continuous operation without oil support above 30% MCR load and control load range of 50% to 100% MCR.

45. From the submissions of CEA, it is inferred that the technical minimum of thermal generating units should not be less than 50% of MCR loading of the unit for old as well as new plants. In our view, operation of thermal generating station on technical minimum has commercial implication for the generator in terms of increase in heat rate, secondary fuel oil consumption and auxiliary energy consumption which enhances the actual energy charges and the same cannot be loaded to other beneficiaries which are not being regulated. Therefore, there is a need for adjusting the implication of enhanced energy charges from the revenue earned from sale of regulated power apart from normative energy charges and fixed charges. The Commission has proposed amendment to the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010 by prescribing a technical minimum of 55% along with compensation mechanism to make good the loss of the generating station. Therefore, the issue of operation of the thermal generating unit at technical minimum and its operational and financial implication during the period of regulation of power supply shall be dealt with in accordance with the amendment to the Grid Code which will be finalized and notified shortly.

## Prayer (c) of NTPC in IA: Decide a methodology to ensure that recovery of fixed charges by the generating company be accorded higher priority.

46. NTPC has suggested that it should first be allowed to recover its fixed charges and variable charges and surplus left, if any, should be passed to the

regulating entity from the amount it realizes from sale of the regulated power. After receiving the capacity charges, corresponding to the regulated power from the defaulting/ regulated entity, the surplus fixed charges received shall be passed on to the regulating entity. NTPC has submitted that BRPL vide its letter dated 8.3.2013 addressed to PGCIL with copy to NTPC disputed the power regulation by PGCIL and refused to pay fixed charges to NTPC for the quantum of power under regulation from NTPC generation stations.

- 47. We have considered the submission of NTPC. Regulation 16 of the Power Supply Regulations provides the manner of utilization of revenue on account of regulation of power supply at the instance of the transmission licensee. As per the said Regulation, revenue received on account of sale of power during the period of regulation shall be utilized in the following manner:
  - (a) to pay the energy charges and any incidental expenses of the generating company including trading margin if power is sold through a trader.
  - (b) to pay the outstanding dues of the transmission licensee.
  - (c) any remaining amount to be passed on to the Regulated entity.
- 48. In view of the clear-cut guidelines regarding utilization of the revenue from sale of regulated power, it would not be permissible to utilize any part of the said revenue to meet the liability of the regulated entity for the capacity charges in proportion to its share in the generating station. Further, the interest of the generating company to recover its capacity charge from the regulated entity is

protected under Regulation 17 of the Power Supply Regulations which is extracted as under:

"17. In case of such reduction of drawl schedule, the liability of payment of capacity charges for its original share in the generating station shall remain with the Regulated Entity."

49. The above provision entitles the generating company to recover the capacity charges from the regulated entity for its original share in the generating station. A regulated entity cannot refuse to pay the capacity charges in proportion to its share in the generating station during the period of RPS Regulations . If any regulated entity refuses to pay the capacity charges, it will amount to contravention of the provisions of the Power Supply Regulations and the regulated entity shall be liable to be proceeded against under Section 142 of the Act.

Prayer (d) of NTPC: Direct RLDC/ NLDC to ensure that before curtailment of LTA in case of default of distribution companies, STOA and MTOA to be curtailed first.

50. NTPC has submitted that defaulting entities like BRPL and BYPL continued to use transmission corridors of PGCIL under STOA inspite of denial of Long Term Open Access to them from NTPC stations during the period of regulation of power supply. According to NTPC, denial of STOA can actually make regulation of power supply effective as it would be a real deterrent for the defaulters. NTPC has submitted that when LTA is curtailed, the defaulter is transacting under STOA and in case it buys with heavy price, it will further increase its debts and it will fail the effectiveness of regulation of power supply. NTPC has further submitted that during regulation of power supply to BRPL and BYPL when they were denied long term access to draw power from NTPC, they continued to avail transmission corridor of

the petitioner for buying or selling of power under STOA. NTPC has requested that before withdrawal of LTA of the defaulting distribution companies, STOA and MTOA should be curtailed first and only thereafter, LTA should be curtailed in case of continued default. PGCIL has agreed with the contention of NTPC to deny STOA/MTOA to defaulters prior to regulating power supply under LTA. However, PGCIL has requested for modification of the regulations to ensure that while issuing notice for RPS Regulations of defaulters, their right to trade in short term transactions should be suspended simultaneously.

- 51. POSOCO in its affidavit dated 19.10.2012 has submitted that in case STOA to the defaulting entity is to be curtailed, the procedure prescribed in Regulation 25A of the Open Access Regulations should be followed by the regulating entity. POSOCO has further submitted that RLDC/NLDC would curtail the STOA to the defaulting entity only upon receipt of appropriate direction from the Commission.
- 52. Regulation 25A of the Open Access Regulations provides as under:

"25A. When so directed by the Commission, the National Load Despatch Centre or the Regional Load Despatch Centre, as the case may be, shall not grant short-term open access for bilateral transaction (including transactions through Power Exchange) to the entities and associates of such entities, who consistently and wilfully default in payment of Unscheduled Interchange (Deviation) charges, transmission charges, reactive energy charges, congestion charges, fee and charges for National Load Despatch Centre or Regional Load Despatch Centre including the charges for the Unified Load Despatch and Communication Scheme and Unscheduled Interchange (Deviation) charges to SLDC by an intra-State entity for a short term inter-State transaction"

53. The above provisions empower the NLDC and RLDCs to deny short term open access to the entities who default in payment of UI/Deviation charges, transmission charges, and fees and charges of NLDC/RLDC. The only caveat is that NLDC/RLDCs would deny short term open access in those cases where the

Commission has issued necessary directions to that effect. Two questions arise in connection with operation of Regulation 25A. First, what would constitute 'wilful and consistent' default to serve as trigger point for invocation of regulation 25A of Open Access Regulations? Second, whether such directions should be sought from the Commission on case to case basis or the Commission should specify the circumstance or event on occurrence of which NLDC/RLDC would automatically invoke the provisions of Regulation 25A of Open Access Regulations.

- 54. As regards the 'wilful and consistent default', the Commission has dealt with the same in order dated 25.1.2013 in Petition No. 213/MP/2012. Relevant extract of the order is as under:
  - "11. The word 'wilful' has not been defined in the Open Access Regulations. Black's Law Dictionary defines the word 'wilfulness' as "an act done intentionally and designedly, a conscious failure to observe care; conscious; knowing; done with stubborn purpose, but not with malice." The Supreme Court in Ramachandra N. Kulkarni v. State of Mysore {AIR 1964 SC 1701} has held that a review of various decisions brings out clearly the guiding principle that the meaning to be attached to the words 'wilful' or 'wilfully' has to be ascertained on a close examination of the scheme and nature of the legislation in which the words appear and the context in which they are used. Therefore, the existence of wilful and consistent default on the part of an entity has to be considered in the context of the Open Access Regulations i.e. the requirement for prompt liquidation of transmission charges and other charges. Where an entity has received the bill but has not made the payment by the due date which affects the cash flow position of the transmission licensee or the system operator, such default will be considered as wilful. If such default is prolonged beyond a reasonable period, then the default will be considered as consistent."
- 55. It is to be noted that while RPS Regulations can be invoked for default on the part of a regulated entity to pay the dues of generating companies and transmission licensees, Regulation 25A can be invoked for wilful and consistent default in paying UI/deviation charges, transmission charges, reactive energy charges, congestion charges, and fees and charges for NLDC/RLDCs. Therefore, only in case of default in payment of transmission charges, both Regulation 25A of Open Access

Regulations and RPS Regulations can be invoked. In our view, when regulation of power supply under RPS Regulations is resorted to for default in payment of transmission charges, Regulation 25A should be invariably invoked as otherwise the defaulting entity would defeat the regulation of power supply by scheduling under short term open access. Therefore, the 'wilful and consistent' default will be construed differently in both cases. In our view, default in payment for a period of 90 days from the due date of payment of UI/deviation charges, transmission charges, reactive energy charges, congestion charges and RLDC fees and charges shall be considered as trigger point for invocation of Regulation 25A of Open Access Regulations to deny short term open access to the defaulting entity. However, where a transmission licensee resorts to regulation of power supply, denial of open access under Regulation 25A of Open Access Regulations shall be triggered from the date of commencement of regulation of power supply under RPS Regulations. As regards the second issue as to whether NLDC/RLDCs will be required to approach the Commission for invoking Regulation 25A of Open Access Regulations on case to case basis, it is clarified that NLDC/RLDCs shall be guided by the principle of default trigger date as clarified above and shall not be required to approach the Commission for specific directions in this regard on case to case basis.

Prayer (e) of NTPC: Devising a mechanism to facilitate easy sale of surplus power, both within and outside the region with quick and easy to implement procedure for the same.

56. NTPC has stated that power rendered surplus due to the regulation of power supply to BRPL and BYPL was consented to be taken by Rajasthan. However, the same was not scheduled by NRLDC, who insisted for open access to schedule this power. NTPC has submitted that the Commission vide order dated 11.1.2010 in

Petition No 134/2009 with I.A. No. 54/2009 had decided that scheduling of unrequisitioned surplus power from one beneficiary to other beneficiary of a generating station where tariff is determined by the Commission would be treated as reallocation of power on temporary basis and would not be treated as open access transactions. During the regulation of power supply, if the power of the regulated entity is sold to other beneficiaries of the generating station, the same should be considered as temporary allocation of power and should not be considered as open access transactions.

- 57. The Commission in order dated 11.1.2010 in Petition No. 134/2009 had directed as under:
  - "10......We find that utilization of URS Power should be done through the provision of the IEGC. Para 6.5 of the IEGC clearly states as under:
    - "20. Revision of declared capability by the ISGS(s) (except hydro stations) and requisition by beneficiary (ies) for the remaining period of the day shall also be permitted with advance notice. Revised schedules/ declared capability in such cases shall become effective from the 6th time block, counting the time block in which the request for revision has been received in the RLDC to be the first one."

Therefore, we do not find any justification for amendment to the regulations for the above purpose. Accordingly, we direct that all the generating stations, governed by the Tariff Regulations of the Commission be allowed to change schedule for the unrequisitioned quantum of power from one beneficiary(s) to another beneficiary(s) of the same power station on the requisition by these beneficiaries through the provision provided in the IEGC, i.e. within six time blocks or as per the provisions of the IEGC as amended from time to time. In case the original beneficiary requests back for its share of power, then its schedule and schedule of beneficiary who had availed URS power would be revised in the six time blocks again, or as specified in the IEGC as amended from time to time. These schedule revisions would be treated as re-allocation of power on temporary basis and would not be taken as open access transactions. The tariff would be governed by the terms and conditions of the tariff regulations applicable to the generating stations."

Vide second amendment to the IEGC dated 6.1.2014, six time blocks have been revised to four time blocks.

58. As per the above order, if the URS power is taken by other beneficiaries of the generating station, the same shall be considered as temporary reallocation of power and shall not be considered as open access transactions and the power can be scheduled on the requirement by the beneficiaries within 4 time blocks. In case of regulation of power supply, it is not necessary that the un-requisitioned power would be sold to another beneficiary of the generating station. Moreover, even in the event of sale of power to the other beneficiaries of the generating station on account of regulation of power supply, there will be issue constraint of corridor as the quantum and duration of regulated power may be more and it may not be possible to accommodate scheduling of such power without curtailing short term open access or medium term open access already granted. In our view, the regulated power cannot be given the status of temporary reallocation of power as in case of URS without assessing its impact on the availability of transmission corridors. Therefore, we direct the staff to examine the implications of treating the regulated power at par with URS power in consultation with NLDC/RLDCs and submit to the Commission within a period of three months. Till the issue is decided, we direct that during the regulation of power supply, if a requisition is received from the regulating entity for sale of regulated power to other beneficiaries of the generating station on day ahead basis accompanied by consent letters from the receiving beneficiaries, the same shall be scheduled by NLDC/RLDCs treating the same as deemed short term open access if capacity is available after meeting the demand for short term open access. It is further directed that the regulating entity in such cases shall not be required to pay the short term open access charges, RLDC operating charges etc. while making the request for scheduling of power through short term access on day ahead basis.

## 59. **Summary of order:**

- (a) The word 'consultation' occurring in Regulation 15 of the RPS Regulations shall not be interpreted as 'consent' or 'concurrence' and it will be sufficient if the generating company is informed three days in advance about the transmission licensee's plan to regulate the power supply to the defaulting entity, along with tentative quantum of power sought to be regulated, source and duration of regulation of power supply after considering technical minimum requirement of the thermal units.
- (b) With respect to the impact of UI due to tripping of unit during the sale of such power under regulation, we are in agreement with the contention of NTPC that it should be compensated by the defaulting entity and these expenses shall be considered as incidental expenses under Regulation 16 of Power Supply Regulations.
- (c) During the period of regulation of power supply, for defaults in payment of transmission charges, STOA to the regulated entity shall be denied by NLDC/RLDCs under Regulation 25A of Open Access Regulations from the date of commencement of regulation of power supply. When Regulation 25A is invoked independent of regulation of power supply, default trigger date for invoking Regulation 25A of Open Access Regulations shall be 90 days from the due date of payment of various charges covered under the respective Regulations. NLDC/RLDCs shall deny short term open access to the defaulting entity on occurrence of the default trigger dates as mentioned above without having to approach the Commission on the basis of the request of concerned RLDC or Central Transmission Utility, as the case may be.

- (d) While formulating plan under Regulation 6 of Power Supply Regulations for RPS Regulations, there is a requirement to adhere to the technical minimum of a thermal generating unit. Moreover, operating at technical minimum would increase heat rate, secondary fuel oil consumption and energy charge for which a generating station needs to be compensated. The technical minimum and the compensation for increase in heat rate, secondary fuel consumption and energy charge are proposed to be included in the Grid Code through amendment. Accordingly, technical minimum in case of regulation of power supply will be governed as per the amendment to be notified to the Grid Code.
- (e) The capacity charge for the quantum of regulated power shall be borne by the original beneficiary i.e. the Regulated Entity in accordance with the Regulation 17 and revenue earned on account of sale of regulated power shall be apportioned in accordance with Regulation 16 of the RPS Regulations.
- (f) Staff of the Commission is directed to examine in consultation with NLDC/RLDCs and CEA as to whether the supply of regulated power to other beneficiaries of the generating station should be treated at par with unrequisition surplus and scheduled as temporary re-allocation of power and submit to the Commission its analysis with this regard within a period of 3 months. Till the issue is decided by the Commission, NLDC/RLDCs are directed to schedule the regulated power to other beneficiaries of the generating stations treating the same as deemed short term open access provided that capacity is available after meeting the demand for short term open access and the requisition is received from the regulating entity for sale

of the regulated power to other beneficiaries of the generating station on day ahead basis accompanied by consent letters from the receiving beneficiaries. It is further directed that the regulating entity in such cases shall not be required to pay the short term open access charges, RLDC operating charges, application fees etc., while making the requisition for scheduling of power to short term open access on day ahead basis.

60. With the above, the petition and IA are disposed of.

sd/-(A. K. Singhal) Member sd/-(Gireesh B. Pradhan) Chairperson